



# CMR COLLEGE OF ENGINEERING & TECHNOLOGY

An Autonomous Institution with NAAC Accreditation (A Grade)  
\*Approved by AICTE \*Permanently affiliated to JNTUH \*NBA Accreditation  
Kandlakoya (V), Medchal Road, Hyderabad -501401.

## CIVIL

### Report on Programs conducted in Civil Engineering Department

#### Academic Year 2015-2016

#### 1. Report on Administrative Training Program on Orientation Program on Autonomy in Higher Education (2015-2016)

The Administrative Training Program has conducted from 14.07.15 to 16.07.15.

Day1: Dr. G.Anand, Professor, MRITS, has started the program by lighting the lamp.

The program has started by 10:00AM on 14.07.2015.

Dr. G.Anand has given presentation on the topic. Entitled about six bodies exercising controls on management education which has to play crucial role in growth and development of country, which gave a clear idea to the participants. Faculty from other colleges attended the program.

The Day1 program has concluded by 3:45PM.

Day2: Dr. T.Vijaya Gowri, Professor, BVRIT, has started the program by 10:00AM on 15.07.2015.

Dr. T.Vijaya Gowri has given a presentation on the topic.

It included what is autonomy in higher education and how can institutes improve quality of education and stressed the important role and benefits from Autonomy in Higher Education. Participants from other colleges also attended the program.

The Day2 Program has concluded by 3:30PM.

Day3: Dr. N.Malathi, Professor, VR Siddhartha, has started the program by 9:45AM on 16.07.2015.

Dr. N.Malathi has given a presentation on Autonomy in Higher Education and the need of autonomy in higher education. How to implement the program successfully and the requirements for successful implementation s like participation of students, teacher and management.

She guided the participants regarding the above mentioned topic clearly with good explanation.

Participants from different colleges attended the program.

The Day3 program has concluded by 3:45PM.

The Administrative Training Program on Orientation Program on Autonomy in Higher Education (15-16) concluded and the resource persons have shared their knowledge with the participants. The Participants from other colleges said that the program was very interesting and the content will be very useful in the future.



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### **2. Report on One Week FDP on Introduction to Special Concretes**

One Week FDP on Introduction to Special Concretes has conducted from 10.08.2015 to 14.08.2015.

There were external participants from different colleges and around 10 participants from CMR College of Engineering & Technology.

The Resource Persons for the program are

1. Dr. D.Rupesh, Professor, OU.
2. Dr. V.Bhishma, Professor, OU.
3. Dr. Prasanna Kumar, Geethanjali College Of Engineering and Technology.

**Day1:** Dr. D.Rupesh, Professor, Osmania University, has started the workshop by lighting the lamp on 10.08.2015.

The program has started at 9:30AM with the introduction of concretes.

He has briefed about Special concretes and its uses in construction.

He has discussed various concepts regarding introduction to special concretes and given examples for his explanation.

The program for that day has ended at 3:15PM on 12.08.2015.

**Day2:** Dr. V. Bhishma, Professor, Osmania University, has started the program at 10:00AM on 13.08.2015.

He has given a presentation on introduction of special concretes in the first session and in the afternoon session, he has described the advantages and disadvantages of the special concretes and the questioning session has started at 3:15PM and the session closed at 3:30PM.

**Day3:** Dr. Prasanna kumar, Professor, Geethanjali College of Engineering and Technology, has started the program at 10:00AM on 14.08.2015

He has discussed about the introduction and explained what was special concretes all about.

The Day3 Program was concluded by 3:30PM.

One Week FDP on Introduction to Special Concretes has concluded on 14.08.2015 at 3:30PM.

### **3. Report on One Week FDP On Civil Engineering Techniques and Strategies in the Construction of Buildings**



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FDP on Civil Engineering Techniques and Strategies in the construction of buildings has conducted from 30.11.2015 to 03.12.2015

The Resource Persons for the program are

1. Dr. Dargakumar, Professor, JNTUH on 30.11.2015
2. Dr. Laxman Rao, Professor, JNTUH on 01.12.2015
3. Dr. M.Venu, Professor, IARE on 02.12.2015
4. Dr. V.Gajendra, Professor, St.Peters Engineering College on 03.12.2015 to 05.012.2015

FDP has included above points and taught techniques and strategies in the construction of buildings.

Several characteristics are unique to the planning of constructed facilities and should be kept in mind even at the very early stage of the project life cycle. These include the following:

- Nearly every facility is custom designed and constructed, and often requires a long time to complete.
- Both the design and construction of a facility must satisfy the conditions peculiar to a specific site.
- Because each project is site specific, its execution is influenced by natural, social and other locational conditions such as weather, labor supply, local building codes, etc.
- Since the service life of a facility is long, the anticipation of future requirements is inherently difficult.
- Because of technological complexity and market demands, changes of design plans during construction are not uncommon.

The below points are highlighted in the program.

The planning for a construction project begins with the generation of concepts for a facility which will meet market demands and owner needs. Innovative concepts in design are highly valued not for their own sake but for their contributions to reducing costs and to the improvement of aesthetics, comfort or convenience as embodied in a well-designed facility. However, the constructor as well as the design professionals must have an appreciation and full understanding of the technological complexities often associated with innovative designs in order to provide a safe and sound facility.

FDP on Civil Engineering Techniques and Strategies in the construction of buildings has concluded on 05.12.2015 at 3:45PM successfully.

Participants from CMRCET and from other colleges also attended the FDP.



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### 4. Report on Latest Equipments on Civil Engineering Laboratory

The workshop on Latest Equipments on Civil Engineering Laboratory has conducted during 06.01.2016 to 08.01.2016.

There were external participants from different colleges and institutes and around 15 participants from CMRCET.

The Resource Persons for the program are

1. Dr. M. Kumar, Professor, Osmania University, on 06.01.2016
2. Dr. B. Prasad, Professor, MRITS, on 07.01.2016
3. Dr. Shravana, Professor, JNTUH, on 08.01.2016

The Workshop has started by Dr. M. Kumar, Professor, Osmania University, by lighting the lamp.

The entire three day FDP has conducted successfully with the help of the resource persons.

Resource Persons has given Presentations on latest equipment available to improve the quality teaching with updated equipment.



### 5. Report on a Three Day workshop on Material Testing

The Workshop has conducted from 05.04.2016 to 07.04.2016

There were participants from other colleges and around 15 participants from CMRCET.

The resource persons for this workshop are

1. Dr. G. Anand, Professor, MRITS on 05.04.2016
2. Dr. P. Rammohan Rao, Professor, IARE on 06.04.2016



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3. Dr. V.Gajendra, Professor, St. Peter's Engineering College on 07.04.2016

The three resource persons have guided the participants regarding material testing and gave a clear idea to the Non-Teaching faculty.

The following points are discussed in the program.

1. Why is the material testing important
2. Types of Mechanical Properties
2. Product design and improvement
3. Production Process

The workshop has concluded on 07.01.2016 by Dr. V. Gajendra at 3:45PM.

The program has successfully completed with the help of resource persons.

## **6. Report on Hands on Training to Operate Fire Extinguisher**

The Administrative Training Program has conducted from 17.05.16 to 19.05.16

This training has given by M/s Vijaya firefighting works.

The above points are discussed in the program

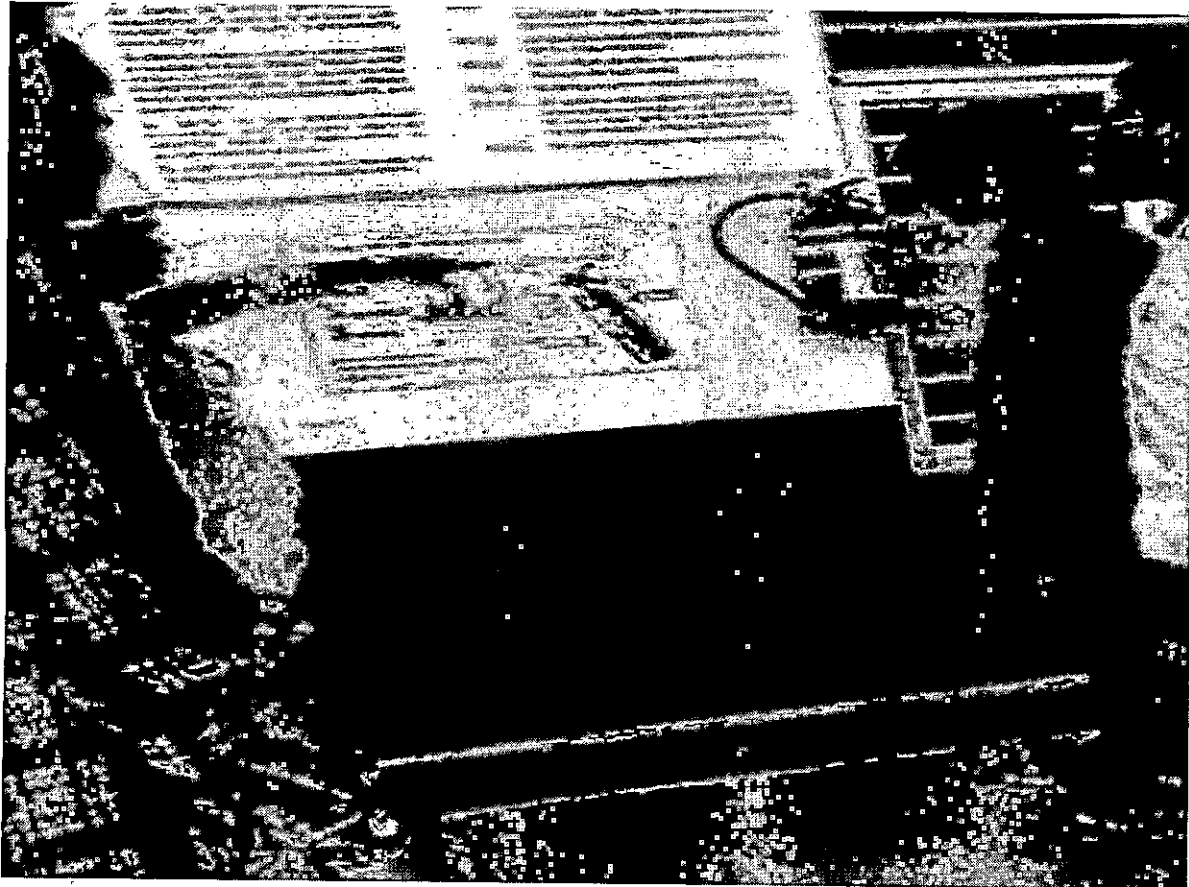
1. Data and Statistics of Fires
2. Purpose of a Fire Extinguisher
3. Fire Classification and Characteristics
4. Fire Extinguisher Types and Identification
5. How to Operate Fire Extinguisher
6. Hazards associated to incipient stage Fires
7. When Not to Fight a Fire



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## 8. Maintenance, Testing and Inspection



Three days training has given a clear idea of fire extinguisher training to the participants.

Participants from other colleges also attended the program.

The program has conducted successfully.

One Faculty Development Program, Two Administrative Training Programs and three Workshops have been conducted in the academic year 2015-2016.

Hence, total 6 programs have been conducted in Civil Engineering Department in the Academic Year 2015-2016.

**EEE**  
**(2015-16)**

**A Report on**  
**One week value added programme on MATLAB/SIMULINK**  
**30/11/2015 to 5/12/2015**

The MATLAB/SIMULINK tool is used to model power system components such as Machines, transmission lines, loads, FACTS devices and associated controls ect for analyzing the system performance under disturbance. The MATLAB provides library of information of all electrical components. It is user defined; system can be simulated by appropriately modeling the system single line diagram. To study the performance of the system under disturbance conditions, possible disturbances can be applied to study. This requires good exposure of the system and its behavior under certain disturbances. This MATLAB/SIMULINK tool is very much useful while carrying out research work.

There were 29 faculty members attended this program. All the participants were benefited on the subject and mainly while working out on tutorial examples and through these participants were able to formulate the problem and analyse. The faculty of CMRCET in particular were exposed to this versitie package and got interested to study more in depth.

**A Report on**  
**One week FDP on Programmable Logic Controllers**  
**14-12-2015 to 20-12-2015**

This workshop focused on the Principle of PLCs is used for continuously monitoring the input values from sensors and produce output for the operation of actuators based on the program.

The PLC is a special computer device used in industrial control systems. Due to its robust construction, exceptional functional features like sequential control, counters and timers, ease of programming, reliable controlling capabilities and ease of hardware usage – this PLC is used as more than special purpose digital computers in industries as well as in other control system areas. Most of the industries abbreviate these devices as ‘PC’ but it is also used for personal computers; due to this, many manufacturers named these devices as PLCs.

The PLC is used not only for industrial purpose but also in civil applications such as washing machines, elevators working and traffic signals control. Different types of PLCs from a vast number of manufacturers are available.

The sessions were planned with great personalities from reputed academic and industries and there were 36 members participated in this FDP from various academic institutions.

**A Report on  
A National Level Workshop on “Overview of EMI and EMC”  
15/02/2016 to 20-02-2016**

This workshop focuses on Electromagnetic interference, is a major problem in modern electronic circuits. To overcome the interference, the designer has to either remove the source of the interference, or protect the circuit being affected. The ultimate goal is to have the circuit board operating as intended – to achieve electromagnetic compatibility. Achieving board level EMC may not be enough. Although the circuit may be working at the board level, but it may be radiating noise to other parts of the system, causing problems at the system level. Furthermore, EMC at the system or equipment level may have to satisfy certain emission standards, so that the equipment does not affect other equipment or appliances. Many developed countries have strict EMC standards on electrical equipment and appliances; to meet these, the designer will have to think about EMI suppression – starting from the board level.

**EMI Source** EMI sources include microprocessors, microcontrollers, electrostatic discharges, transmitters, transient power components such as electromechanical relays, switching power supplies, and lightning. Within a microcontroller system, the clock circuitry is usually the biggest generator of wide-band noise, which is noise that is distributed throughout the frequency spectrum. With the increase of faster semiconductors, with faster edge rates, these circuits can produce harmonic disturbances up to 300 MHz.

The most cost-effective way to design for EMC is to consider the EMC requirement at the early stages of the design (see second Figure). It is unlikely that EMC will be the primary concern when the designer first chooses the components, designs the circuit, and designs the PCB layout. But if the suggestions in this application note are kept in mind, the possibility of poor component choice, poor circuit design, and poor PCB layout can be reduced.

The sessions were planned with reputed persons from academic Institution and there were 30 faculty members participated in this workshop from various academic institutions.





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## MECHANICAL

### Report of the Faculty Development Programmes For Academic Year 2015-16

#### “Computational Fluid Dynamics (CFD)”

Date:25/08/2015

The Faculty development programme on “Computational Fluid Dynamics (CFD)” held on 17-08-2015 to 21-08-2015. This Faculty Development Program is Discussed on **Computational fluid dynamics (CFD)**. It is a branch of fluid mechanics that uses numerical analysis and data structures to analyze and solve problems that involve fluid flows. Computers are used to perform the calculations required to simulate the free-stream flow of the fluid, and the interaction of the fluid (liquids and gases) with surfaces defined by boundary conditions. With high-speed supercomputers, better solutions can be achieved, and are often required to solve the largest and most complex problems. Ongoing research yields software that improves the accuracy and speed of complex simulation scenarios such as transonic or turbulent flows. Initial validation of such software is typically performed using experimental apparatus such as wind tunnels. In addition, previously performed analytical or empirical analysis of a particular problem can be used for comparison. A final validation is often performed using full-scale testing, such as flight tests. CFD is applied to a wide range of research and engineering problems in many fields of study and industries, including aerodynamics and aerospace analysis, weather simulation, natural science and environmental engineering, industrial system design and analysis, biological engineering and fluid flows, and engine and combustion analysis. This Faculty Development Program will provide the opportunities to flourish the Knowledge for the participants.

It is a One week training programme and was scheduled from 9.10am to 4.00pm for Four days including lunch and tea snacks. The Training sessions were quite interactive in nature and included various points, which helped in traits. Overall the training Programme provided various methods for Computational fluid dynamics .

#### “Choice based credit systems- UGC XII plan guide lines”

Date:12/11/2015

The Faculty development programme on “Choice based credit systems- UGC XII plan guide lines” held on 03-11-2015 to 7-11-2015 . This Faculty Development Program is Discussed on University Grants Commission (UGC). The UGC has formulated various regulations and guidelines from time to time to improve the higher education system and maintain minimum standards and quality across the Higher Educational Institutions (HEIs) in India. The academic reforms recommended by the UGC in the recent past have led to overall improvement in the higher education system. However, due to lot of diversity in the system of higher education, there are multiple approaches followed by universities towards examination, evaluation and grading system. While the HEIs must have the flexibility and freedom in designing the examination and evaluation methods that best fits the the curriculum, syllabi and teaching-learning methods, there is a need to devise a sensible system for awarding the grades based on the performance of students. Presently the performance of the students is reported using the conventional system of marks secured in the examinations or grades or both. The conversion from marks to letter grades and the letter grades used vary widely across the HEIs in the country. This creates difficulty for the acadamia and the employers to understand and infer the performance of the students graduating from different universities and colleges based on grades. This Faculty Development Program will help to the all colleges and it is benefited for the all participants.



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It is a One week training programme and was scheduled from 9.10am to 4.00pm for Five days including lunch and tea snacks. The Training sessions were quite interactive in nature and included various points, which helped in traits. Overall the training Programme provided various Guide line in UGC.

## “Auto Desk Inventor”

Date:08/12/2015

The Faculty development programme on “Auto Desk Inventor” held on 27-11-2015 to 3-12-2015. This Faculty Development Program is Discussed on Auto Desk Inventor. The Inventor allows 2D and 3D data integration in a single environment, creating a virtual representation of the final product that enables users to validate the form, fit, and function of the product before it is ever built. Autodesk Inventor includes powerful parametric, direct edit and freeform modeling tools as well as multi-CAD translation capabilities and in their standard DWG drawings. Inventor uses Shape Manager, Autodesk's proprietary geometric modeling kernel. Autodesk Inventor competes directly with SolidWorks, Solid Edge, and Creo. This Faculty Development Program will provide the opportunities to flourish the Knowledge for the participants.

It is a One week training programme and was scheduled from 9.10am to 4.00pm for one week including lunch and tea snacks. The Training sessions were quite interactive in nature and included various points, which helped in traits. Overall the training Programme provided various methods for Auto Desk.

## “Finite element Analysis (FEA) & Computational Fluid Dynamics (CFD)”

Date:18/01/2016

The Faculty development programme on “Finite element Analysis (FEA) & Computational Fluid Dynamics (CFD)” held on 4-1-2016 to 9-1-2016. This Faculty Development Program is Discussed on Finite element Analysis (FEA) & Computational fluid dynamics (CFD). It is a branch of fluid mechanics that uses numerical analysis and data structures to analyze and solve problems that involve fluid flows. The finite element method (FEM) is a numerical method for solving problems of engineering and mathematical physics. Typical problem areas of interest include structural analysis, heat transfer, fluid flow, mass transport, and electromagnetic potential. The finite element method formulation of the problem results in a system of algebraic equations. Computers are used to perform the calculations required to simulate the free-stream flow of the fluid, and the interaction of the fluid (liquids and gases) with surfaces defined by boundary conditions. With high-speed supercomputers, better solutions can be achieved, and are often required to solve the largest and most complex problems. Initial validation of such software is typically performed using experimental apparatus such as wind tunnels. In addition, previously performed analytical or empirical analysis of a particular problem can be used for comparison. A final validation is often performed using full-scale testing, such as flight tests. CFD is applied to a wide range of research and engineering problems in many fields of study and industries, including aerodynamics and aerospace analysis, weather simulation, natural science and environmental engineering, industrial system design and analysis, biological engineering and fluid flows, and engine and combustion analysis. This Faculty Development Program will provide the opportunities to flourish the Knowledge for the participants.

It is a One week training programme and was scheduled from 9.10am to 4.00pm for Four days including lunch and tea snacks. The Training sessions were quite interactive in nature and included various points, which helped in traits. Overall the training Programme provided various methods for FEM & CFD.

## “EDGE CAM”

Date:25/05/2016

The Faculty development programme on “EDGE CAM” held on 16-05-2016 to 21-05-2016. This Faculty Development Program is Discussed on EDGE CAM. It is a market leading computer aided manufacturing (CAM) system for NC part programming. With unparalleled ease of use and sophisticated



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toolpath generation, it's the only CAM system you'll need for milling, turning and mill-turn machining. EDGE CAM utilizes your in house knowledge and experience to drive the CAM process with automation tools to suit different applications - allowing you to maintain your competitive edge. In this programme they are discussed different applications. This Faculty Development Program will provide the opportunities to flourish the Knowledge for the participants.

It is a One week training programme and was scheduled from 9.10am to 4.00pm for One week including lunch and tea snacks. The Training sessions were quite interactive in nature and included various points, which helped in traits. Overall the training Programme provided various methods for Edge Cam.

## “Foundry and Forging Application”

Date:28/12/2015

The Training Programme on **Foundry and Forging Application** held on 21-12-2015 to 23-12-2015. A **foundry** is a factory that produces metal castings. Metals are cast into shapes by melting them into a liquid, pouring the metal into a mold, and removing the mold material after the metal has solidified as it cools. The most common metals processed are aluminum and cast iron. However, other metals, such as bronze, brass, steel, magnesium, and zinc, are also used to produce castings in foundries. In this process, parts of desired shapes and sizes can be formed. **Forging** is a manufacturing process involving the shaping of metal using localized compressive forces. The blows are delivered with a hammer (often a power hammer) or a die. Forging is often classified according to the temperature at which it is performed: cold forging (a type of cold working), warm forging, or hot forging (a type of hot working). For the latter two, the metal is heated, usually in a forge. Forged parts can range in weight from less than a kilogram to hundreds of metric tons. The Training Program also deals with Theory of Inventive Problem Solving techniques as a tool for solving complicated problems of Engineering. This Training Program will provide the opportunities to flourish the Knowledge for the participants.

It is Three day training programme and was scheduled from 9.10am to 4.00pm for Three days including tea and snacks. The Training sessions were quite interactive in nature and included various points, which helped in traits.

## “Advances in Forging & Applications”

Date:18/02/2016

The Training Programme on **Advances in Forging & Applications** held on 11-02-2016 to 13-02-2016. **Forging** is a manufacturing process involving the shaping of metal using localized compressive forces. The blows are delivered with a hammer (often a power hammer) or a die. Forging is often classified according to the temperature at which it is performed: cold forging (a type of cold working), warm forging, or hot forging (a type of hot working). For the latter two, the metal is heated, usually in a forge. Forged parts can range in weight from less than a kilogram to hundreds of metric tons. The Training Program also deals with Theory of Inventive Problem Solving techniques as a tool for solving complicated problems of Engineering. This Training Program will provide the opportunities to flourish the Knowledge for the participants

It is Three day training programme and was scheduled from 9.10am to 4.00pm for Three days including tea and snacks. The Training sessions were quite interactive in nature and included various points, which helped in traits.

## “Technical skills in workspace for Non Teaching Staff”

Date:16/06/2016

The Training Programme on **Technical skills in workspace for Non Teaching Staff** held on 9-06-2016 to 11-06-2016. Educational strategy that provides teachers with real-life work experiences where they can apply academic and technical skills and develop their employability. It is a series of educational courses which integrate



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the school or university curriculum with the workplace to create a different learning paradigm. "Work-based learning deliberately merges theory with practice and acknowledges the intersection of explicit and tacit forms of knowing. The Training Program also deals with Theory of Inventive Problem Solving techniques as a tool for solving complicated problems of Engineering. This Training Program will provide the opportunities to flourish the Knowledge for the participants

It is Three day training programme and was scheduled from 9.10am to 4.00pm for Three days including tea and snacks. The Training sessions were quite interactive in nature and included various points, which helped in traits.

## **"Outcome Based Education (OBE) and NBA accreditation process"**

Date: 15/12/2015

The Faculty development programme on **"Outcome Based Education (OBE) and NBA accreditation process"** was held from 7-12-2015 to 11-12-2015. This Faculty Development Program was intended to make the participant understand the process of NBA accreditation process and let the audience expose to both program level and institution level criteria. The program included an emphasis on NBA SAR format, which entirely relied on objective based evaluation. Unlike other similar programs, this program reached the crest of NBA process.

It was a One Week training program and was scheduled from 9.10 AM to 4.00 PM for five days including lunch and tea snacks. The training sessions were quite interactive in nature and included various points, which helped in traits. Overall the training program provided various methods for Outcome Based Education (OBE) and NBA accreditation process.

## **"Servicing, Maintaining, Constructional Details, Working and Use of Transformer in Distinct Engineering Equipment"**

Date:07/10/2015

The Training programme on **"Servicing, Maintaining, Constructional Details, Working and Use of Transformer in Distinct Engineering Equipment"** was held on 05-10-2015 to 07-10-2015. The prime objective of this training program was to introduce about the different type and size of transformer used in distinct engineering fields. This training program comprehensively dispensed the procedure for the servicing, maintenance and constructional detail of different size of transformer. This training program will be helpful to enhance the job enrichment, technical knowledge of the employee, excellence in organizational work and, overall learning. This Training Program also covered the use of transformer in different home appliances.

It is a Three day training program and was scheduled from 9.10am to 4.00pm for one week including lunch and tea snacks. The Training sessions were quite interactive in nature and included various points, which helped in traits. Overall the training Program was very knowledgeable and helpful for everyone as the contents of program proved this.



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## ECE

The Department of ECE has conducted 5 Faculty Development Programmes and 3 Workshop programs and 2 Orientation programs for the year 2015-2016. All the programs was conducted under the chairmanship of Principal Dr. M.Ramalinga Reddy and the convenership of Dr.B.Lokeswara Rao.

A One Week Faculty Development Programme on **Recent Trends in Communication systems using simulink** was held during the period of 6th to 15th June 2016 for which the allotted budget was 42000/- . The coordinator for this FDP is Dr V Rajesh , Professor and **Mr. B.Suresh Ram, Assoc.Professor of ECE Department.** Prof K.Vidyasagar,Professor,ECE Department, Sai Spurti Institute of Engineering was the main resource persons and the total no. of participants are 30.

A One Week Faculty Development Programme on **Basic Electronics Engineering & its applications** was held during the period of 2nd to 8th May 2016 for which the allotted budget was 35000/-. The coordinator for this FDP is Mrs.VandanaKhare , Professor and **V Panduranga, Asst.Professor of ECE Department.** Dr. Abdul Kayum, Asst.Professor, CV Raman College of Engineering was the main resource persons and the total no. of participants are 40.

A One Week Faculty Development Programme on **Basic Electronics Engineering & its applications** was held during the period of 25th to 30th April 2016 for which the allotted budget was 25000/-. The coordinator for this FDP is Dr M Venugopalrao, Professor and **Ms. ChHimabindu, Asst.Professor of ECE Department.** Dr.RupamGoswami was the main resource persons and the total no. of participants are 35.

A One Week Faculty Development Programme on **Analog & Digital IC Design-Hands on Experience using Cadence tools** was held during the period of 26 Nov-1st Dec 2015 for which the allotted budget was 40,000/-. The coordinators for this FDP. Ms. T.Swapna Rani, Asst.Professor, ECE Department. Ms. T.Swapna Rani, Asst.Professor, ECE Department was the main resource persons and the total no. Of participants are 30.

A One Week Faculty Development Programme on **“SoC System Design & Research Methodology using Xilinx Tools & Techniques”** was held during the period of 8th to 13th October 2015 for which the allotted budget was 40,000/-. The coordinators for this FDP Mr.G.Balwanth Reddy, Asst.Professor, ECE Department. Mr.G.Balwanth Reddy, Asst.Professor, ECE Department was the main resource persons and the total no. Of participants are 30.

A One Week Faculty Development Programme on **Digital design through Spartan5 FPGA** was held during the period of 15th to 17th May 2016 for which the allotted budget was 8000/-. The coordinators for this FDP Mr B Narendra Nagu, Asst.Professor, ECE Department. Mr B Narendra Nagu, Asst.Professor, ECE Department was the main resource persons and the total no. Of participants are 22.

A **“Five day workshop on “Hands on training on Cadence Tools”** was held during the period of 21st to 25th November 2015 for which the allotted budget was 9000/-. The coordinators for this FDP. Ms. T.Swapna Rani, Asst.Professor, ECE Department. Ms. T.Swapna Rani, Asst.Professor, ECE Department was the main resource persons and the total no. Of participants are 20.

A **“Three day workshop on Keil IDE Tool “** was held during the period of 4th to 6th July 2015 for which the allotted budget was 8000 /-. The coordinators for this FDP. Mr.G.Balwanth Reddy, Asst.Professor, ECE Department. Mr.G.Balwanth Reddy, Asst.Professor, ECE Department was the main resource persons and the total no. Of participants are 23.

One Day Orientation Program on **“NIRF Policies”** was held on 11<sup>th</sup> October 2015, the allocated budget was Rs.4000/- & One day Orientation program on **“Office Management Course”** was held on 18th June 2016, the allocated budget was Rs.6000/-.



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## CSE

The Department of CSE has conducted 8 Faculty Development Programmes and 2 training programs for the year 2015-2016. All the programs were conducted under the chairmanship of Principal Dr.M.Ramalinga Reddy and the convener ship of Dr.K.Srinivasa Rao.

One week faculty development Programme on Personality development was held during the period of 7<sup>th</sup> to 11<sup>th</sup> December 2015, for which the allotted budget was Rs. 25000/-. The coordinator for this FDP is Dr. K.L.S Soujanya, Professor Department of CSE. Mr V Stephen Deva Paul HR WIPRO was the main resource person and the total no. of participants are 50.

One week faculty development Programme on Research Proposals Funding Agencies, Opportunities and Methodologies were held during the period of 14<sup>th</sup> November 2015, to 20<sup>th</sup> november for which the allotted budget was Rs. 10000/-. The coordinators for this FDP are Dr.K.Srinivasa Rao Professor, Department of CSE. Dr.P.R Hariharan DSIR and Dr.K.Srinivas Raju Professor, BITS-Pilani were the main resource person and the total no. of participant is 40.

One week faculty development Programme on HTML5 & Python Programming was held during the period of 11<sup>th</sup> to 15<sup>th</sup> April 2016, for which the allotted budget was Rs. 35000/-.The coordinator for this FDP is Dr.K.Srinivasa Rao Professor, Department of CSE. Mr.G.Kishore Kumar, RGM CET, Nandyal was the main resource persons and the total no. of participant is 40.

One week faculty development Programme On Advanced Web Technologies was held during the period of 6<sup>th</sup> to 10<sup>th</sup> July 2015, for which the allotted budget was Rs. 30000/-. The coordinator for this FDP is Dr.K.Vijaya Kumar Professor, Department of CSE, Dr.Mohammed Umar Khan CBIT was the main resource person and the total no. of participants are 40.

One week faculty development Programme on Mobile Application Development was held during the period of 16<sup>th</sup> to 20<sup>th</sup> July 2015 for which the allotted budget was Rs. 30000/-The coordinator for this FDP Mr B.siviah, Department of CSE. Dr Ramesh, MGIT was the main resource persons and the total no. of participants is 40.

One week faculty development Programme on Operating Systems was held during the period of 13<sup>th</sup> to 17<sup>th</sup> June 2016, for which the allotted budget was Rs. 30000/-. The coordinator for this FDP is Dr.K.Rama Krishna Professor and Dr.K.Vijaya Kumar Professor Dept of CSE. Mr.M.Rudra Kumar AITS Rajampet and Dr Narendra SVIT was the main resource persons and the total no. Of participants are 40.

One week faculty development Programme on Security & Privacy were held during the period of 9<sup>th</sup> to 13<sup>th</sup> May 2016, for which the allotted budget was Rs. 28000/-.The coordinator for this FDP is Dr.K.Vijaya Kumar Professor Dept of CSE. Mr.N.Sandeep Chaitanya, VNRVJIET was the main resource persons and the total no. Of participants are 40.

One week workshop on MS office was held during the period of 9<sup>th</sup> to 11<sup>th</sup> July 2015. The coordinator and resource person for this workshop is Mr.sivaskanda, Assistant Professor, Department of CSE. The total no. of participants are 30.

One week Workshop on C language was held during the period of 30<sup>th</sup> to 4<sup>th</sup> December 2015 .The coordinator and resource person for this workshop is Mr.S.Gandendar Reddy, Assistant Professor, Department of CSE. The total no. of participants are 20.



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## H&S

The Department of H&S has conducted 3 Faculty Development Programmes and 2 training programs for the year 2015-2016. All the programs was conducted under the chairmanship of Principal Dr. M.Ramalinga Reddy and the convenership of Dr.V.A.Narayana.

A one week faculty development Program on Modern Trends in Teaching was held during the period of 4<sup>th</sup> to 8<sup>th</sup> January 2016, for which the allotted budget was Rs. 50,000/-. The coordinators for this FDP are Dr.V.A.Narayana, HOD H&S, Ms. Fathima Mary, Professor .Dr.M.Rajagopala Chary the main resource person and the total no. of participants are 16.

A one week faculty development Recent Trends in Optics and Modern physics was held during the period of 6<sup>th</sup> to 10<sup>th</sup> July 2015, for which the allotted budget was Rs. 58,000/-. The coordinators for this FDP Dr.V.A.Narayana, HOD H&S, and Ms Soma Mukhopadyay Professor of Physics department. and the total no. of participants are.15

A one week faculty development Program on Relevance of Mathematics in Engineering field was held during the period of 27<sup>th</sup> to 31<sup>st</sup> July 2015 for which the allotted budget was Rs. 50,000/-. The coordinators for this FDP are Dr.V.A.Narayana, HOD H&S . Dr.Nageshwarnath was the main resource persons and the total no. Of participants are 17.

A 3 day Hands on training on Applied physics experiments was held during the period of 28<sup>th</sup> to 30<sup>th</sup> December 2015, for which the allotted budget was Rs.20,000 /-. The coordinators for this training program is Ms.Jyostna .The total no. of participants are.7

A 3 daytraining Program on Maintenance and updating of records in chemistry lab was held during the period of 3<sup>rd</sup> to 5<sup>th</sup> August 2015, for which the allotted budget was Rs.20,000 /-. The coordinators for this training program is P. Santhosh kumar .The total no. of participants 23.





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## MBA

### List of Programmes organized in the MBA Department in the Academic year 2015-16:

1. FDP on Market Research and Analytics
2. FDP on Innovative Approaches in Management Teaching
3. Work Shop on Data Handling in SPSS
4. FDP on Scientific Teaching Methodology for Effective Pedagogy
5. FDP on Integrating ICT in Teaching & Learning Process
6. FDP on "Entrepreneurship & Digital India"

### FDP on Market Research and Analytics: (27-07-2015 to 31-07-2015)

Five-Day Faculty Development Programme on "Marketing Research and Analytics inaugurated at CMR College of Engineering and Technology. During the inaugural address, Principal, Prof. (Dr.) Ramalinga Reddy, wished for constructive learning and advised for participatory mode of learning. This Five- Day event consists of training on basic confirmatory analysis, time series data analysis, panel data measurement, market efficiency, structural equation modeling and other qualitative tools of business analytics

All marketing managers face a treasure hunt. What is the treasure they seek? It is the business advantage to their division to come ahead of their competition, or the intuitions that they can provide to other business divisions, or the impressions they could create on their peers/superiors. Those clues? That is the data that the company has been getting from various fronts. In most cases these data are preexistent and managers do not need extra effort to collect them. What are your treasure hunting skills? Needs to be developed through a course on marketing analytics. Most marketing/sales managers gets lots of customer/market data which goes un-analyzed. This course equips them to analyze such information and generate valuable insights about customers and competition. We will focus on the synergy between data and decisions that managers need to make. The program uses a series of case studies, contextualized datasets, hands-on analysis and new

Generation tools to aid participants in understanding customer relationships and managing their value.

### FDP on Innovative Approaches in Management Teaching: (05-10-2015 to 09-10-2015)

#### **About FDP:**

Innovative Approaches in Management Teaching (IAMT) is a five-day intensive intellectual and action-based engagement for management faculty to improve and make them better management teachers. The programme focuses on new and innovative teaching approaches and methods. It includes: lectures, discussions, role plays, team exercises, management games, and simulations, videos, small team capstone projects, and direct faculty feedback. The programme offers a tremendous learning opportunity



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to the participants and helps them to gain the latest skills, strategies, and tools needed to conduct effective and result-oriented sessions.

- Develop vital and innovative teaching skills.
- Design and customize teaching approaches suiting student needs.
- Communicate professional information, innovative ideas, and objectives to students and participants with clarity and force.
- Use new and innovative ways of engaging students in the classroom.
- Identify and apply new technology that will improve the ability to present ideas and information with impact.
- Use new teaching strategies to make their classes more lively, interactive, and interesting

## **Work Shop on Data Handling in SPSS: ( 04-01-2016 to 08-01-2016)**

### **About FDP:**

The objective of workshop is to impart the data analytical capabilities to the faculty, research scholars and post graduate students who want to enhance their ability of data analysis, capabilities to facilitate decision making. The participants will also learn about use of various data analysis techniques in research, designing the study, collecting data, issues involved in coding, editing, analyzing and interpreting the data collected.

The participants of the program could be the Faculty Members /Research Scholars/ Industry Delegates/Students who have an inherent inclination towards research. The participants may be the beginners or on the middle of research or at the analysis stage. You can attend this programme if you want to develop a holistic view on the statistical tools to do an excellent research. The SPSS software training is intended to instill confidence in data analysis and its interpretation. The corporate and educational Institutes can sponsor their employees.

## **FDP on Scientific Teaching Methodology for Effective Pedagogy: (18-01-2016 to 23-01-2016)**

### **About FDP:**

The quality of any education system is based on the quality of teachers. Pedagogy is an art of teaching and effective pedagogies involve a wide range of techniques which focuses on higher order of thinking and satisfies diverse needs of range of learners. There is no single universal approach suitable for all situations, and effective teachers use various strategies to support intellectual engagement. Effective



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pedagogy techniques enables teachers to observe and assess students in context of class room situations which increases the prospects of effective learning. Today many legal education scholars advocated and many university and law school teaching policies demands for a pedagogical approach which emphasized the significance of effective learning by the law teacher and a deep approach to learning by the law students. Currently there exists a wide range of pedagogical option designed with appropriate techniques for effective learning outcomes. In this context the School of Law NMIMS Mumbai proposed to organize seven day faculty development programme on “Effective Pedagogical tools in Legal Education” for faculties working in law colleges and law schools.

## Objectives of the Programme:-

In context of the above discussion, this programme aims to fulfill the following objectives-

- To enable teachers to master a repertoire of instructional methods and strategies to ensure good and effective teaching in law.
- To expose various pedagogies and then by incorporating essential pedagogical knowledge, skills, dispositions and commitments that enable teachers to practice at high level.
- To enable the participants to understand and practice “Outcomes Based teaching ” and “Learner Centric Teaching Strategies”
- To enable the participants to develop appropriate tools of assessment
- To enable them recognize and imbibe the proficiencies and qualities of good teacher

## **FDP on Integrating ICT in Teaching & Learning Process : (28-03-2016 to 01-04-2016)**

### About FDP:

ICT skills, but also utilizing ICT to improve teaching and learning is of utmost importance for teachers in performing their role of creators of pedagogical environments. While literature provides some evidence of the effectiveness of using ICT in technical considerations, little is known about which learning strategies and pedagogical framework should be used for education and training. How to construct these electronic teaching and learning environments so that they are based on specific epistemologies or knowledge bases? What will be the new vision and guiding principles of teacher development for pedagogy technology integration? As we become increasingly supported by ICT, teaching and learning will not be the same as before. We will have to make use of the rich and exciting opportunities offered by the new technologies in education to reach our new goal and vision. The integration of ICT into the very idea of teaching and learning always places pedagogy over technology.



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It is not the only concern to master ICT skills, but rather it involves using ICT to improve teaching and learning.

## **FDP on" Entrepreneurship & Digital India": (03-05-2016 to 07-05-2016)**

### **About FDP:**

Entrepreneurship in recent times has become a serious area of study. It is considered to be a solution for creating wealth, generating employment and providing new goods and services. Developing the spirit of entrepreneurship among the young has become vital because of the government cannot provide jobs for all kinds of unemployed youth, the corporate sector will provide limited jobs only to the best and that too without any job security and lastly, very often it is difficult to find an ideal job. Entrepreneurship has very little to do with money. It is instead an attitude, a way of thinking. It goes beyond simply starting a company. In other words not all people who start their own organizations can necessarily be categorized as entrepreneurs. Entrepreneurs challenge assumptions, recognize opportunities in periods of change, reveal patterns where others see chaos and mobilize limited resource to achieve an objective. The IEDUP in its efforts to create enterprising youth who are capable of surviving in an entrepreneurial society has been making some interventions in this direction through its Entrepreneurship Programme. The Entrepreneurship Programmes are targeted both for teachers of the various schools, colleges and universities as well as for the students.



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**EXAMINATION BRANCH**

Date: 27-07-2015

**Report on "Faculty Awareness Program on Choice Base Credit System"**

"Faculty awareness program on Choice Based Credit System" has been successfully organized on 25-07-2015 in ECE seminar hall. The speakers mainly focused in importance of Choice Base Credit System. Speakers also highlighted some other important points such as academic regulations, Instruction of various examination activities and evaluation system. The faculty and staff members of all departments have attended and got benefited with this program.

(Dr. M. Narsi Reddy)

Controller of Examinations

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### Outcomes of the Faculty Development Program Cell:

- It helped in enriching the faculty vitality in key domains of teaching, assessing, research, professionalism, and administration is perceived to improve educational environment significantly and enhances the academic performance of learners to strengthen the CMR College of Engineering & Technology.
- The Faculty Development program Cell regularly conducted faculty empowerment programs. Teachers have a repertoire of effective teaching strategies and used them to implement well-designed teaching programs and lessons. They regularly evaluate all aspects of their teaching practice to ensure they are meeting the learning needs of their students
- Every time a faculty comes out of a FDP & training programme, the student community feels the difference in teaching skills, depth of knowledge and teaching pedagogy used by the faculty in the class room. The CMR College of Engineering & Technology
- FDP Cell program designed and delivered programs effectively enrich faculty out comes in the following modes:
  - Begin with a clear vision (Structural Empowerment)
  - Maintain the right perspective (New Knowledge, Innovation, Improvements)
  - Network (Transformational Leadership)
  - Be responsive and take the initiative (Professional Practice)
  - Exhibit integrity (Empirical Quality Results)

*plmr*  
Convener